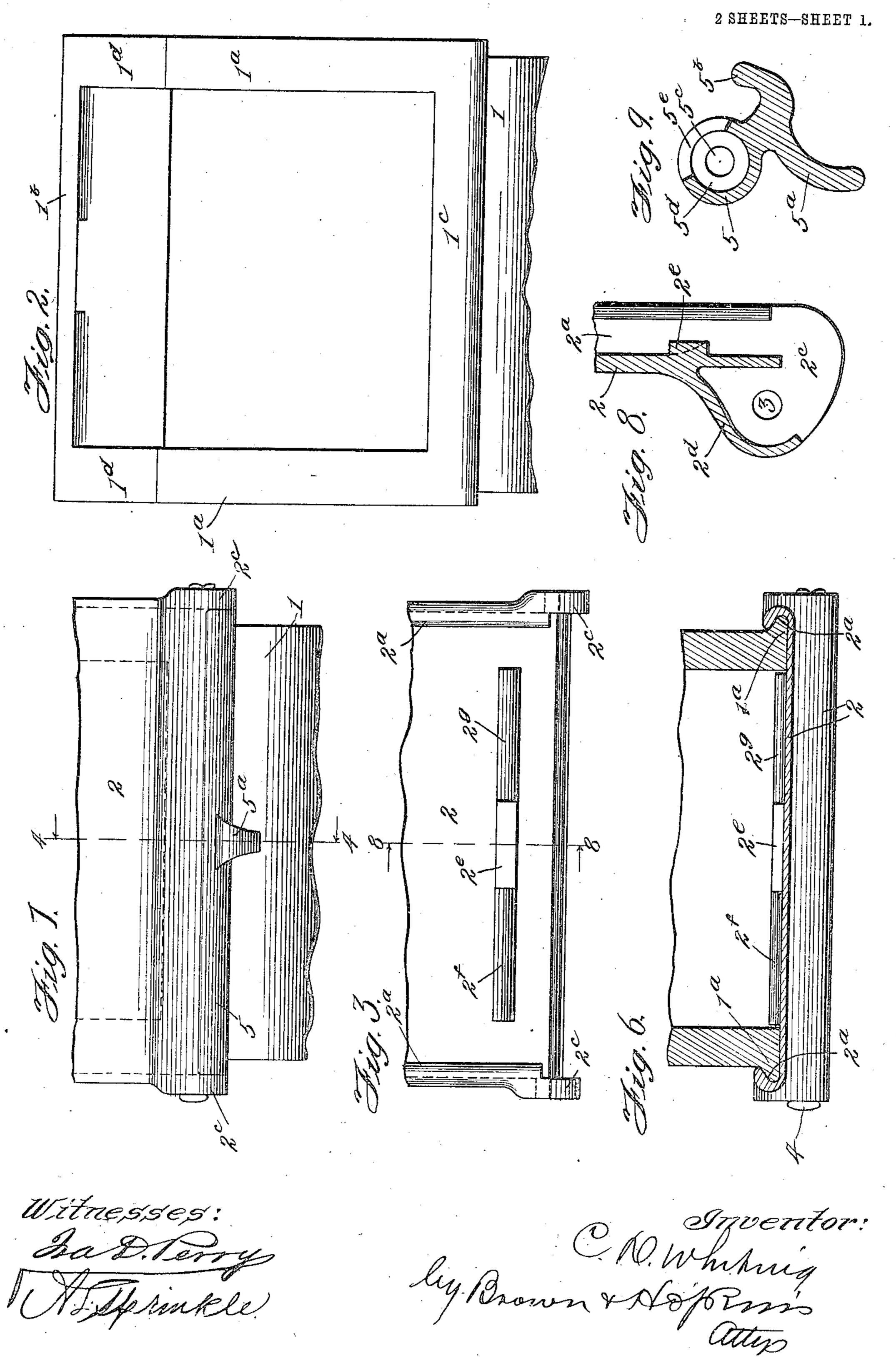
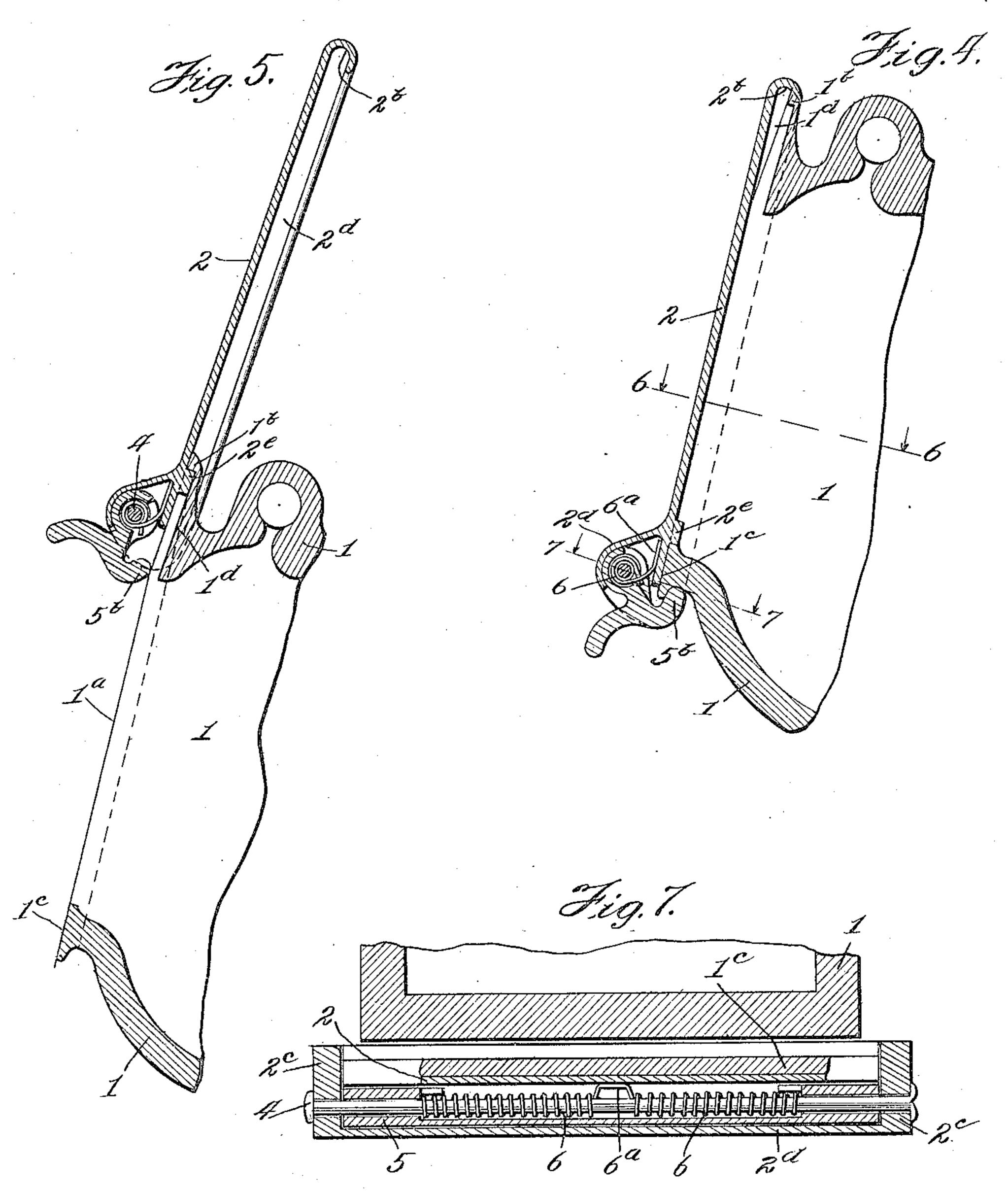
C. D. WHITING. JOURNAL BOX LID.

APPLICATION FILED JAN, 21, 1907.



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UNITED STATES PATENT OFFICE.

CHARLES D. WHITING, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO THOMAS J. MURPHY, OF ST. PAUL, MINNESOTA.

JOURNAL-BOX LID.

No. 875,026.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed January 21, 1907. Serial No. 353,219.

To all whom it may concern:

Be it known that I, Charles D. Whiting, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and 5 State of Minnesota, have invented certain new and useful Improvements in Journal-Box Lids, of which the following is a full,

clear, and exact specification.

The invention relates to improvements in journal boxes for railway cars and the like.

The object of the invention is to provide an improved form of lid or door for the oil box of a journal bearing which is simple and economical in construction and effective in

15 its operation.

To the attainment of these ends and the accomplishment of other new and useful objects, as will appear, the invention consists in the features of novelty in the construction, combination and arrangement of the several parts hereinafter more fully described and claimed, and shown in the accompanying drawings, illustrating an exemplification of

this invention, and in which—

Figure 1 is a broken view in elevation of a lid and journal box embodying the invention. Fig. 2 is a front elevation view similar to Fig. 1 of the journal box with the lid or cover removed. Fig. 3 is a rear view of the lid, the 30 upper part thereof being broken away. Fig. 4 is a vertical sectional view through the lid and journal box taken on line 4—4, Fig. 1, showing the lid in a closed position. Fig. 5 is a view similar to Fig. 4, showing the lid in 35 open position and the construction by which the lid is secured in open position. Fig. 6 is a sectional view through the lid and journal box on the line 6—6 of Fig. 4. Fig. 7 is a sectional view on line 7—7, Fig. 4. Fig. 8 is 40 a sectional view on line 8—8, Fig. 3. Fig. 9 is an enlarged detail sectional view of the spring-controlled, pivoted locking member mounted in the lower extremity of the lid. This view is an enlarged view of the same 45 part as it appears in Figs. 4 and 5 and is taken on line 4—4 of Fig. 1.

In this embodiment of the invention the ordinary form of journal box is shown designated by the numeral 1 and in which the opening desired to be closed by the lid is rectangular in shape and bounded by the side members 1^a, top member 1^b and bottom member 1^c. The lid 2 is of a size corresponding to this opening in the box and is provided on its back side with grooves along its outer

edges facing inwardly as indicated at 2^a, and which are adapted to support the lid by sliding on the projecting edges of the side members 1^a. On the back side of the lid at its upper edge, the material is extended to 60 form the groove 2^b shaped similarly to the grooves 2^a. This top groove on the lid is adapted to coöperate with the upper flanged edge of the box 1^b to form a closure when the lid is in its lowermost position, as illustrated 65

in Fig. 4.

The lower edge of the lid is provided with downwardly extending side members 2°, one at each side of the lid, which are provided with suitable holes 3, adapted to take 70 the key or pin 4, which is used in securing the pivoted locking member 5 in position. Adjacent to the lower edge of the lid, the material is formed into a protecting flange or cover 2^d connecting the members 2° and 75 serving to partially inclose the pivoted member 5. The locking member 5 is provided with a suitable lug or handle 5^a adapted to be grasped by the hand of the operator in manipulating the lid.

5° is an extension adapted to take under the lower flanged edge of the edge member 1° for the purpose of locking the lid in its closed position, as illustrated in Fig. 4.

It will be observed that the member 5 is 85 provided with a longitudinal hole 5° adapted to take the pin 4, and that the material adjacent to this hole, except for a short distance at each end, is cut away to form a housing 5^d adapted to take the elastic controlling spring 6. The housing 5^d has the surrounding shell broken away, as indicated at 5° for the purpose of providing means for inserting the torsional spring 6 and also for the purpose of permitting a branch of the 95 spring as 6^a to contact with the wall of the lid. The spring is also suitably secured to the member 5 in order that the member 5 will be normally held in closed position.

The lid 2 is provided on its back side midway between its side edges with the lug 2^e.
This lug also has side extensions 2^g and 2^f of
the same height as 2^e at the lower edge in
order to form a ledge for contacting with the
top edge of 1^c on the journal box when the
lid is in closed position. The members 2^g
and 2^f have their outer surfaces inclined
upwardly in the direction of the surface of
the lid, thus forming means for deflecting
the lubricating oil to the interior of the box 110

and so preventing it from escaping at the joining between the lower edge of the lid and its corresponding surface 1° on the box. The member 2^e, however, is of the same width 5 throughout, thus providing a ledge on its upper edge for contacting with the lower edge of 1^b at the top of the box and thus securing the lid against further upward movement when in raised position, as illus-10 trated in Fig. 5. In order to provide a convenient means for sustaining the lid in raised position, the side edges 1a of the aperture on the box are beveled at their upper extremities, as indicated at 1^d. This con-15 struction, it will be seen, causes the upper edge 1^b to lie out of the plane of the edges 1^a and 1° and permits the lid when in raised position to incline toward the plane of the top of the box so that the plane of the lid 20 corresponds to the plane of the beveled edges 1^d. The lid will be held firmly in this inclined position by reason of the pressure of the extension 5^b against the sides 1̄^a of the journal box, thus effectively securing the lid 25 in open or raised position until released by being brought into the plane of the side members 1^a and 1^c and so permitting the grooves or guide-ways 2ª on the sides of the lid to register on the slides or flanged edges 30 of 1^a. By this construction, it will be seen that a convenient and efficient form of lid is secured—one which forms an effective closure and at the same time may be conveniently operated in order to gain access to the 35 interior of the journal box.

In order that the invention might be fully understood the details of an embodiment thereof have been thus specifically described

but what I claim is:—

1. In a lid for journal boxes, the combination of means for slidably mounting the lid on a journal box and a pivoted member adapted to secure the lid in closed position.

2. In a lid for journal boxes, the combi-45 nation of means for slidably mounting the lid on a journal box, a pivoted member adapted to secure the lid in closed position, and elastic means for controlling said pivoted member.

3. In a lid for journal boxes, the combination of means for slidably mounting the lid on a journal box, there being a housing on said lid adjacent to one end thereof, a pivoted locking member secured therein, 55 and elastic means for controlling said pivoted member.

4. In a lid for journal boxes, the combination of means for slidably mounting the lid on a journal box, there being a housing 60 on said lid and a pivoted member mounted therein and adapted to secure the lid in closed position.

5. In a lid for journal boxes, the combination of means for slidably mounting the 65 lid on a journal box, there being a housing

on said lid, a pivoted member carried in said housing and adapted to secure the lid in closed position, and elastic means for control-

ling said pivoted member.

6. In a device of the character described, 70 the combination of a journal box, a lid slidably mounted thereon embodying side members adapted to engage corresponding members on said journal box, top and bottom members adapted to engage cor- 75 responding members on the journal box when the lid is in closed position, and a housing adjacent the lower edge of the lid, and a pivoted member in said housing adapted to lock the lid in closed position.

7. In a device of the character described, the combination of a journal box, a lid slidably mounted thereon embodying side members adapted to engage corresponding members on said journal box, top and 85 bottom members adapted to engage corresponding members on the journal box when the lid is in closed position, and a housing adjacent the lower edge of the lid, a pivoted member in said housing adapted 90 to lock the lid in closed position, and elastic means for controlling said pivoted member.

8. In a device of the character described, the combination of a journal box embodying side members and a bottom member lying 95 in a common plane adjacent to an opening in the wall of said box, and a top member having its surface beveled at an angle to the plane of the said bottom and side members, and a lid adapted to register with the said 100 bottom and side members when in closed position and with the said top member when

in open position.

9. In a device of the character described, the combination of a journal box embody- 105 ing side members extending approximately parallel with each other and provided with surfaces lying in a plane common to each member, and a transverse member connecting the side members and having its surface 110 beveled at an angle to the plane of the said side members, a lid slidably mounted on the said side members, and means for securing the lid in closed position.

10. In a device of the character described, 115 the combination of a journal box having an opening, said box being provided with parallel side members whose surfaces lie in a common plane throughout their entire length and are provided with beveled sur- 120 faces near their upper extremities, a lid slidably mounted on the said side members, and a pivoted locking member carried by said lid and adapted to engage the said side members when the lid is in open position. 125

11. In a device of the character described, the combination of a journal box having an opening therein, and parallel slides adjacent to said opening, a lid mounted on said parallel slides, and an elastically controlled 130

adapted to engage said parallel slides when

the lid is in open position.

12. In a lid for journal boxes, having a 5 housing adjacent to one end thereof, a pivoted member secured in said housing, said pivoted member embodying a cylindrical body portion, a flange member extending laterally from said cylinder adapted to 10 contact with the wall of the journal box for the purpose of securing the lid thereto and means for manually controlling said pivoted

member.

13. In a lid for journal boxes, having a 15 housing, a pivoted member mounted in said housing embodying a cylindrical portion extending approximately the entire width of the lid, and being provided with a recess extending longitudinally of the cylindrical 20 portion adapted to receive elastic means for the purpose of controlling said pivoted member in relation to the lid, and an extending flange member adapted to contact with the walls of the journal box, and means 25 for elastically controlling the pivoted member.

14. In a device of the character described

pivoted member carried by said lid and the combination of a journal box having an opening therein and parallel slides adjacent to said opening, a lid mounted on said 30 parallel slides and provided with a boss or lug adjacent the lower edge thereof, and a pivoted locking member carried by said lid and adapted to coöperate with the said boss or lug to secure the lid in closed position.

15. In a device of the character described the combination of a journal box having an opening therein and parallel slides adjacent to said opening, a lid mounted on said parallel slides and provided with a boss or lug 40 adjacent the lower edge thereof, and an elastically controlled pivoted locking member carried by said lid and adapted to cooperate with the said boss or lug to secure the lid in closed position.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 16th day

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of January A. D. 1907.

CHARLES D. WHITING.

Witnesses: JAY W. CRANE, Delia Halversen.